

From: R Kelley
To: [PRC; Juarez, Debora](#)
Subject: Project # 3028516; 11340 23rd Ave NE
Date: Sunday, September 03, 2017 10:32:29 PM
Attachments: [Comments from Rebecca Kelley.docx](#)

PRC and Debora Juarez:

I am sending this to you, along with the many neighbors who are concerned about the housing density proposed by Project #3028516; 11340 23rd Ave. NE.

We have asked for an extension of the comment period. We submitted this request, in writing, before the deadline of September 5th, 2017, primarily because none of us received the Notice of Application to allow for a full 14-day comment period.

Having watched building lots in our Victory Heights neighborhood black-topped and completely covered with 1.2 million dollar housing (with no – zero – lawns) ...; having watched the City allow permit violations beyond belief on Lake City Way, we are gathered to say:

STOP. No more.

We recognize development will happen. But ... can we, **for once**, have it happen according to Code? According to City policy?

Below, is the body of the attached comment, submitted by Rebecca Kelley.

Comments from Rebecca Kelley; 2327 NE 115th St.; Seattle, WA 98125

I am responding to the Notice of Application for the division of 5 parcels into 6 on the property at 11340 23rd Ave. NE, Project #3028516. This is a heavily forested parcel, containing numerous mature, second growth conifers as well as a variety of mature deciduous species. The property slopes downward, west to east. The eastern boundary is a steep slope or small bluff, with homes directly below the slope.

While I understand that the owner has the right to develop the property, I question the proposed density for the reasons listed below.

TREES

- 1) My property is contiguous to the north side of the parcel in question (2327 NE 115th St.).

Of biggest concern is the fact I own a 100+ foot fir tree on the property line. If the proposed development follows the site plan on file, it appears the root ball of my tree will be damaged by the excavation for the new homes.

Additionally, there are several large firs on the property in question near my tree. This grouping is essential as a windbreak for my tree.

(http://courses.washington.edu/fe450/projects/99_hoodcanal/Chapter15/Ch_15.htm “This allows the clump of trees to act like a stand with neighboring trees helping to hold each other up against the forces of the wind.”) If these trees are cut, my tree will no longer have the protection afforded by the other trees in the “grouping.”

In short, if the site design goes through as planned, it will create a hazardous situation. I will be left with little choice but to cut down my tree. And I will be forced to seek legal recourse to cover both the cost of removal and the loss of an irreplaceable asset on my property.

2) The trees on the property under review are also important for wildlife. For several years,

merlin have nested in our neighborhood. Prey animals (perching birds) are readily available in the many mature trees growing on the lot. The fledged "youngsters" have also used the forest on the lot to build their wing muscles and to hide from crows. Year round, I see merlin hunting, using the trees as stealth cover. Other, more common birds also make use of the forest: flickers; towhees; juncos; wrens; robins; crows; native pigeons; sparrows; blue jays; chickadees; and kinglets, to name a few. The occasional pileated woodpecker, coopers hawk, and red-tailed hawk have been spotted as well.

Migratory species are also known to transit the forest on the site. As a signatory to the Urban Bird Treaty, Seattle has pledged “*the city recognizes the importance of protecting urban bird habitat, reducing hazards to migrating birds, and connecting people to nature within the city limits.*”

3) Any decision about the density of housing and subsequent loss of trees needs to meet Seattle

Ordinance Number 119791. (*“The Hearing Examiner shall consider all relevant facts to determine whether the public interest will be served by the subdivision and ... is designed to maximize the retention of existing trees”*)

HYDROLOGY

1) The loss of permeable surface will be substantial, given the current site plan and proposed

housing density. Permeable surfaces allow the infiltration of water through the soil and ultimately into the groundwater system. As part of the Thornton Creek drainage, the introduction of impermeable surfaces on the Project Site will affect the recharge of clean, naturally filtered water into the watershed. Instead, the water will run off the impervious surfaces.

From the City’s “Thornton Creek Watershed Characterization Report”: “*About half the watershed*

is covered by impervious surfaces, resulting in large volumes of stormwater runoff. ... Seattle and Shoreline address stormwater problems in three basic ways: improving conveyance, increasing storage, and reducing runoff volumes. ... When aggressively enforced, local laws such as Seattle's Stormwater, Grading and Drainage Ordinance can be effective in this watershed. ... Habitat is one of the most critical elements in protecting water quality and beneficial uses of water."

Seattle's storm water code acknowledges the need to regulate the storm-related runoff caused by developments:

SEATTLE STORMWATER CODE:

22.805.020 MINIMUM REQUIREMENTS FOR ALL PROJECTS

Minimum Requirements for Maintaining Natural Drainage Patterns. For all projects, natural drainage patterns shall be maintained and discharges shall occur at the natural location to the maximum extent feasible and consistent with subsection 22.805.020.B. Drainage water discharged from the site shall not cause a significant adverse impact to receiving waters or down-gradient properties. Drainage water retained or infiltrated on the site shall not cause significant adverse impact to up-gradient or down-gradient properties.

Given the site plan for 6 houses on the Project Site, there appears to be little room for natural drainage and filtration. The storm water from all 6 homes will have to be fed into the current sewer system; a system that was not designed to handle excessive storm water (as none of the older homes in Victory heights have storm water connections to the sewer system). This use of the sewer system for storm runoff is, in fact, at odds with the City's rain basin project uphill from the Project Site. And it is unlikely 100% of the storm water running off of impervious surfaces on the site will end up in the sewer. It will end up in the soil.

SOIL STABILITY

The soil on the site's slope is Qva (Vashon advance outwash deposits), a sandy, dense deposit which is exposed on the slope of the Project Site. According to a USGS map of NE Seattle (USGS Scientific Investigations Map 3065 by Derek B. Booth, Kathy Goetz Troost, and Scott A. Schimel), underlying the Qva is Qpf. Qpf layers are intermixed silt, sand, gravel known for, *"landslides commonly associated with groundwater emergence within and immediately above."*

Numerous landslide modeling studies reinforce this conclusion. In a study entitled "Infinite slope stability under steady unsaturated seepage conditions," published by Water Resources Research and authored by N. Lu and J. Godt, the following conclusion is reached: *"... hillslopes of both sandy and silty soils, failure can occur above the water table under steady infiltration conditions, which is consistent with some field observations that cannot be predicted by the classical infinite slope theory."*

In fact, according to a Seattle Shallow Landslide Hazard Map by Edwin L. Harp, John A. Michael, and William T. Laprade, the steep slope or bluff on the east end of the Project Site is, indeed, prone to shallow landslides.

The vegetation on the Project Site is vital in the mitigation of slide potential for a variety of

reasons. First, the forest uptakes storm water as it flows downslope (it also uptakes the excess drainage created by the city-built storm water catchments uphill from the Project Site). Additional protection from landslides is created by the tree root matrix. In a modeling study entitled, "Rainfall-triggered shallow landslides at catchment scale: "Threshold mechanics-based modeling for abruptness and localization," published by Water Resources Research, authored by J. von Ruetten, P. Lehmann, and D. Or, root matrix is recognized as a critical data point for landslide prediction modeling:

4.1.2. Root Reinforcement in Forested Areas

[38] For zero lateral root strength, the volume and numbers of landslides were larger than for reinforced soil (Figures 5a and 5b). As shown in Figure 5e, the fraction of landslides in the forest increased with decreasing lateral root reinforcement. Because forests were preferentially located in steep regions of the catchment, less landslides were triggered in steep hillslopes with increasing reinforcement, therefore slope angles of landslides shown in Figure 5c slightly decrease with increasing reinforcement.

The change in hydrology, combined with the loss of root matrix, will introduce increased slide potential on a steep slope already prone to shallow earth movement.

CONCLUSION

I am opposed to the proposed density and re-plat for the reasons stated above.

- 1) Loss of trees and canopy cover. I will suffer financial and personal property loss if the site is developed as proposed. Wildlife, in particular birds, will also lose an important refuge.
- 2) Storm water management and hydrology. The increase in impervious surfaces, combined with the loss of vegetation will impact the city's sewer system and introduce concentrated hydrologic pressures in the soil. It will also decrease natural filtration into the Thorton Creek watershed.
- 3) Landslide potential. The eastern slope of the Project Site is a known shallow landslide zone. The loss of root matrix, combined with the hydrological impacts, could drastically affect the downslope/down-bluff neighbors.

In judging the "public good," I maintain these concerns far outweigh the city's current "Density First" attitude toward development.

Thank you for your time,
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